# MONTGOMERY COLLEGE 

Department of Mathematics

## Rockville Campus

MA 103 KATIRAIE QUIZ \#3 Form A SECTIONS (2.4, 3.1, 3.2) FALL 2006
NAME __ SCORE: ___ 20 *** RETAIN ALL GRADED PAPERS FOR YOUR RECORDS ***

1. Find the slope - intercept form of a line parallel to $2 y+3 x=1$, passing through (-4, 3)
2. Find the slope - intercept form of a line perpendicular to $y=\frac{-1}{4} x+5$, passing through $(-3,-4)$
3. In 1998 Toyota sold 1.5 million vehicles. This number increased to 1.8 million in 2003.
a) Find a linear function that models the data.
b) Determine the year when Toyota sold 1.7 million vehicles by solving a linear equation.
c) Predict the year when Toyota may sell 2 million vehicles.
4. The length of a rectangular room is 3 feet more than its width. If the perimeter of the room is 85 feet, find the width and length of the room.
5. Solve the following equations:
a. $\frac{3 x}{3}-\frac{2 x}{4}=\frac{1}{6}$

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\text { b. } \quad \frac{3 x+1}{3}=\frac{2 x-1}{3}
$$

